SUBJECT	: **S**ystem on **A**WIPS for **F**orecasting and **E**valuation of **SE**as and L**A**ke**S (SAFESEAS)**
PURPOSE	: **Alpha Testing**
PATCH NUMBER	**:** P522_MDL_A100255
AFFECTED SITES	: MOB, BOX, LOX, DTX, EYW
VERIFICATION STATEMENT	**:** The installation procedures were tested and verified at National Weather Service Headquarters (WSH) Silver Spring, MD.
REINSTALLATION **:** **REQUIREMENTS**	None
TIME REQUIRED	**:** Approximately 20 minutes.
SECURITY LEVEL	**:** root

GENERAL

The Meteorological Development Laboratory (MDL) is conducting an Alpha Test of the new SAFESEAS software, with the aid of the sites mentioned above.

The patch file **P522_MDL_A100255.tar.gz** must be downloaded from the NOAA1 server and unbundled to extract the installation scripts and new executables.

This installation will perform the following functions:

°   Install the new executables in their proper locations on the appropriate machines.
°   Update the patch log file **/awips/PatchLog** on ds1.

PROCEDURE: SAFESEAS Software Alpha Test Installation Procedure

1.   At a workstation, start a telnet session and log in **ds1** as **root**.

2.   Change to the **/data/local** directory, create the subdirectory **SAFESEASalpha**, set permissions for it, and cd to it:

```
cd /data/local
mkdir SAFESEASalpha
chmod 777 SAFESEASalpha
```

```
cd SAFESEASalpha
```

3.   Connect to the NOAA1 ftp server by typing:

```
ftp 165.92.25.15
```

4.   Once connected, login as **anonymous** user(user: nonymous? password is e-mail address).

5.   Get the   522_MDL_A100255.tar.gz?file by typing:

```
binary
hash
cd /pub
get P522_MDL_A100255.tar.gz
bye
```

6.   To unbundle the "**P522_MDL_A100255.tar.gz**" file, type:

```
gunzip P522_MDL_A100255.tar.gz
tar xvf P522_MDL_A100255.tar
chmod 777 SAFESEAS_install.csh
```

7.   Make sure **no D-2D** is running on **lx2**. Make a typescript file, and run the SAFESEAS install script. **Remember** to answer "**yes**" or "**y**" when asked if you want to record this in the Patch Log.

```
script -a installSAFESEAS.out
./SAFESEAS_install.csh
```

8.   Search the installSAFESEAS.out file for the text: ext busy?(without the quotes). This would indicate a abnormal situation where a file could not be replaced because its process was still running on lx2. *If the   ext busy?search succeeds, then you must do the steps below. Otherwise, skip to step 9:*

- check lx2 again to make sure **no** D2D is running, then rlogin to lx2;

```
rlogin lx2
```

- for each file where the   ext busy?was indicated, check again whether a process is running for the file

```
cd /awips/fxa/bin
lsof filename                (Where filename is the name of the file whose process
                             was running)
```

- if **lsof** returns a PID for the process/file, try to kill the PID:

        kill -9 PID   (Where PID is the PID number from `lsof`)

- run the command   **sof filename** again to see if it was able to be killed (i.e., no output from the `lsof` command). If unable to kill the PID of the process, rename the file for the executable, in-place in the same directory:

        mv filename filename.OB1baseline

- then manually install the SAFESEAS version of the file(s) from the /data/local/SAFESEASalpha/AOB1_MDL_SAFESEAS1.0 directory to the /awips/fxa/bin directory:

        cd /data/local/SAFESEASalpha/AOB1_MDL_SAFESEAS1.0
        cp filename /awips/fxa/bin

When all necessary files have been installed in this manner, exit the lx2 session to get back as root on the ds1:

        exit

9.   While root on ds1, become user fxa.

        su - fxa

10.   Change to /awips/fxa/bin directory and change fxa-data.purge file access permissions by typing:

        cd /awips/fxa/bin
         chmod 755 fxa-data.purge

11.   Edit the **fxa-data.purge** file using **vi** or another editor, and add the SAFESEAS-specific line. The line to be added to the file is the one found between the comment lines *"# SAFESEAS"* through *"# END OF SAFESEAS"* in the SAFESEAS version of the **fxa-data.purge** file which you will find in:

/data/local/SAFESEASalpha/AOB1_MDL_SAFESEAS1.0/fxa-data.purge

Add the line in the same position in the run-time file. **DO NOT SIMPLY REPLACE YOUR PURGE FILE WITH THE SAFESEAS VERSION OR SERIOUS PURGE PROBLEMS WILL RESULT AT YOUR SITE.**

12.   Now log in to **lx2** as **fxa** to run D-2D and SAFESEAS localizations:

        rlogin lx2

```
cd /awips/fxa/data/localization/scripts
./mainScript.csh -tables -dirs
createSSsetupFile
```

13.   Switch to **root** with **no option "-"** by typing:

```
su
```

14.   Add SAFESEAS applications to the Linux Startup Menu by typing:

```
cd /data/local/SAFESEASalpha
./SAFESEASstartMenu.csh
  exit
```

15.   While still fxa, rlogin to the the as1 and stop and restart the Notification Server, and start the SAFESEAS processor:

```
rlogin as1
stopNotificationServer
startNotificationServer
startSSprocessor
exit
```

16.   Exit all the sessions, and close the telnet window. Start D-2D on lx2.

This completes the software patch installation procedure. Consult the SAFESEAS User Guide for instructions on starting the SAFESEAS D-2D displays and customizing the setup.